



STATE OF MARYLAND

DHMH

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June 20, 2007

Public Health & Emergency Preparedness Bulletin: # 2007:24
Reporting for the week ending 06/16/07 (MMWR Week #24)

Current Threat Levels:

National: Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)
Maryland: Yellow (ELEVATED)

REVIEW OF DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>*	<u>Meningococcal</u>*	*(non-suspect cases)
New cases:	* Data not yet released from Division of Communicable Disease Surveillance		
Prior week:	* Data not yet released from Division of Communicable Disease Surveillance		
Week#24, 2006:	5	1	

1 outbreak was reported to DHMH during MMWR Week 24 (June 10-June 16, 2007):

1 Gastroenteritis outbreak

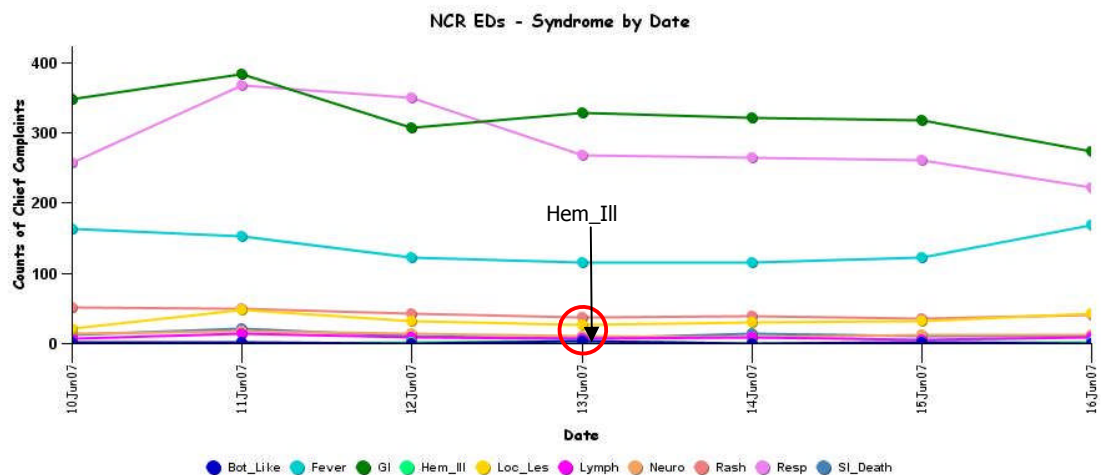
1 outbreak of GASTROENTERITIS associated with a Nursing Home

SYNDROMIC SURVEILLANCE REPORTS:

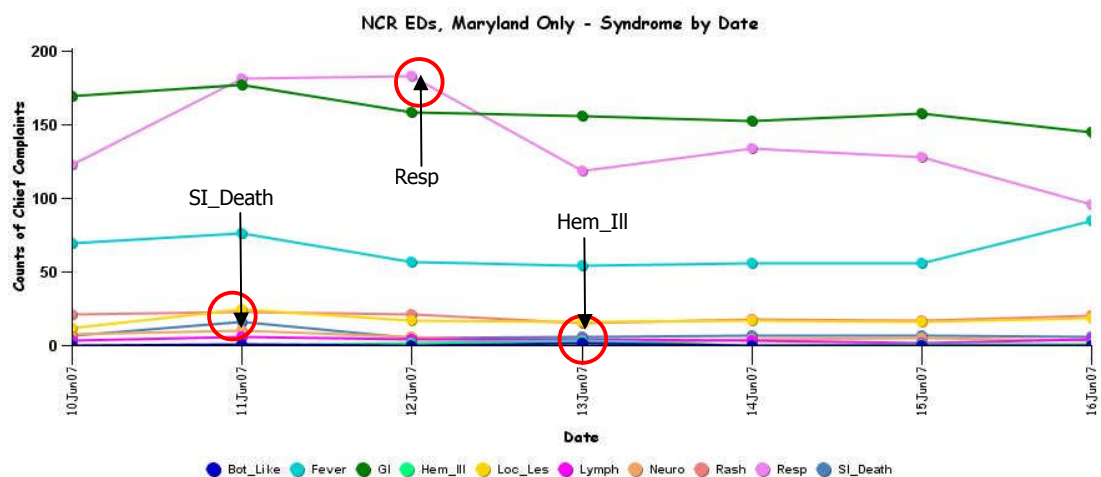
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts only.

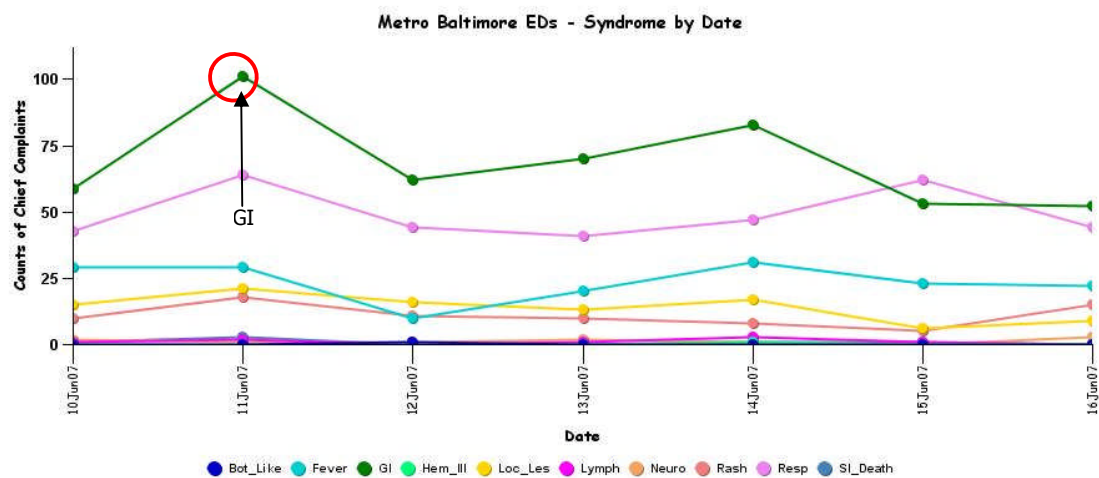
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness. * Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.



* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system

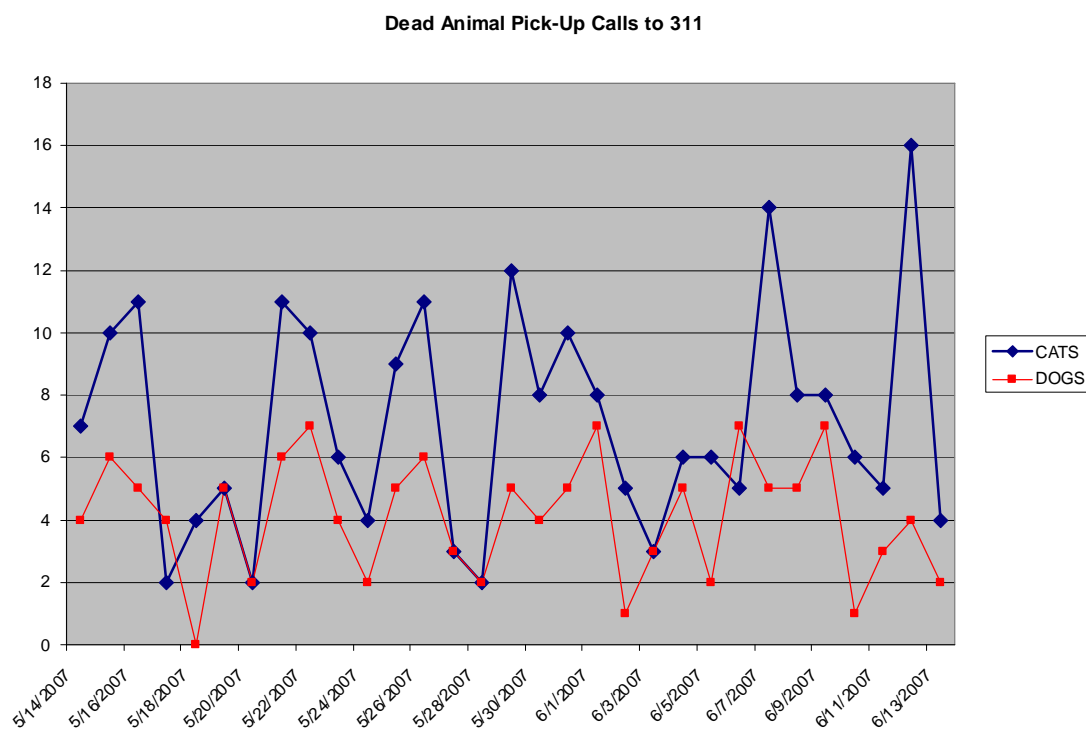


* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system



* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

Baltimore City Syndromic Surveillance Project: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.

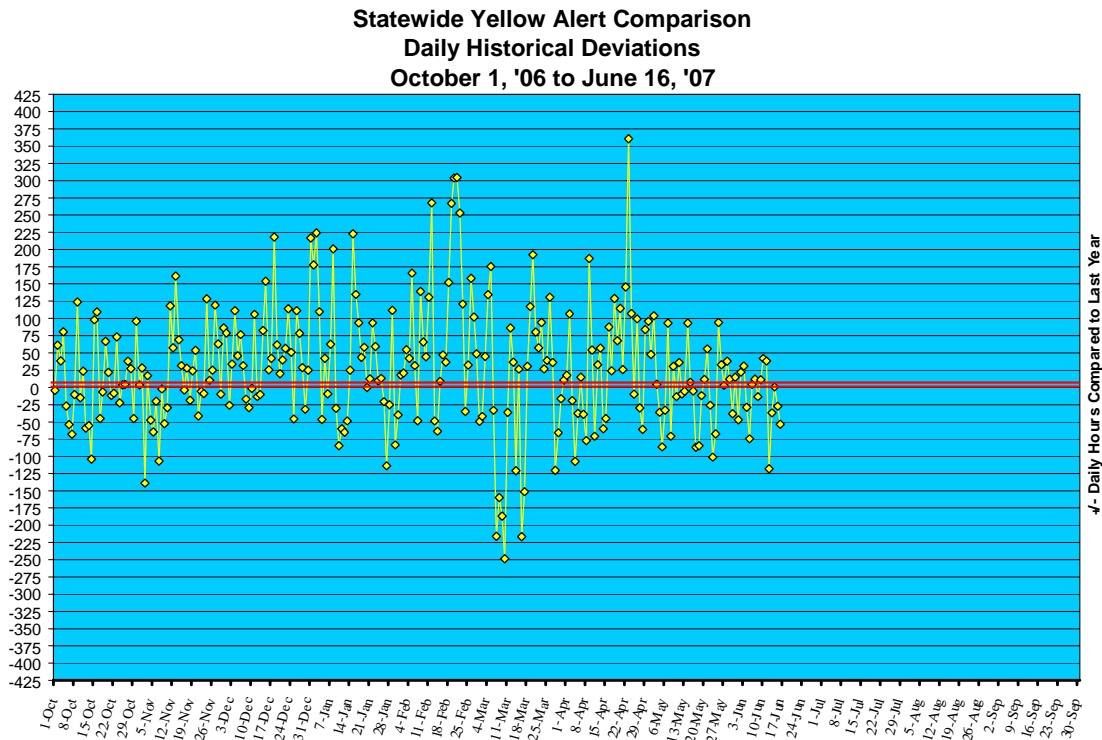


REVIEW OF MORTALITY REPORTS:

OCME: OCME reports no suspicious deaths related to BT for the week

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/06.

**NATIONAL DISEASE REPORTS:**

E. COLI O157, GROUND BEEF, EXPANDED RECALL (Western USA): 11 Jun 2007, A meat supplier has greatly expanded a ground beef recall, which now includes about 5.7 million pounds of fresh and frozen meat that may be contaminated with E. coli O157:H7. David Goldman, acting administrator of the USDA (US Department of Agriculture) Food Safety and Inspection Service, announced on Jun 9, that the recall would be expanded to include products with sell-by dates from Apr 6-20. The beef, sold in 11 western states, was distributed by California-based United Food Group LLC. Goldman said that none of the latest batch of suspect beef is in stores now because the product would be well past its expiration date, but consumers may still have some of the meat at home. "It is important for consumers to look in their freezers," Goldman said. The meat has been blamed for an E. coli outbreak in the western states that resulted in 14 illnesses, spanning Apr 25 through May 18. All the patients have recovered. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents)* Non-suspect case

PLAGUE, HUMAN, SEPTICEMIC (New Mexico): 12 Jun 2007, State health investigators plan to trap rodents in a rural area south of Santa Fe, in hopes of discovering how a 50-year-old woman got plague. They will also knock on doors to warn residents and distribute brochures explaining how to avoid contracting the severe infection, which is commonly spread to humans from fleas that have feasted on infected rodents. The woman has recovered after being hospitalized with septicemic plague, a blood infection that can cause death. Symptoms can include fever, vomiting, diarrhea, abdominal pain, low blood pressure, blood-clotting problems, and organ failure. Dr. Paul Ettestad, a public health veterinarian for the Health Department, said it's not a good sign that the state has confirmed 4 cases of plague since April. "It could be a significant year for a lot of plague activity," he said. Prairie dogs and rock squirrels, common carriers of the plague, may have swelled in number over the past couple of years because of wetter than usual seasons, Ettestad said. Combine a lot of rodents with a cool, wet spring, in which fleas multiply, and you have got a mixture that could produce more plague cases in humans in 2007, he said. (Plague is listed in Category A on the CDC list of Critical Biological Agents)* Non-suspect case

TULAREMIA, FELINE (South Dakota): 13 June 2007, A dead cat in Sioux Falls has tested positive for a bacteria that could infect humans. The cat, sent to the state lab in Pierre, was found to have tularemia, also known as "rabbit fever," a tick-borne disease that can infect humans, said Sioux Falls Police Lt. Tom Olson. It was 1 of 5 cats found dead in the area of Cactus Hills mobile home park in north Sioux Falls during the past 6 weeks. There could be more unreported cases of the disease, he said. "Our concern is with the number of incidents we've had with dead cats that potentially some of the residents up in that area may have contact with the cats," Olson said. "And this disease can be spread through the contact with the dead animal." Judy Buseman, city public health director, said the disease is not a major threat to public health. "This is a naturally occurring disease in North America. It shows up in all the states," she said. South Dakota last year had 6 cases of the disease in humans, with an average of 200 cases a year nationwide, Buseman said. People should wear rubber gloves when handling a dead animal, double bag the animal for disposal and wear tick repellent, Olson said. The disease is treatable but could be fatal in humans, he said. Officers have informed residents in the Cactus Hills neighborhood of the disease. (Tularemia is listed in Category A on the CDC list of Critical Biological Agents)* Non-suspect case

INTERNATIONAL DISEASE REPORTS:

CRIMEAN-CONGO HEMORRHAGIC FEVER (Turkey): 10 Jun 2007, An outbreak of hemorrhagic fever in Turkey has sickened 133 people and killed 7 of them so far this year, the Health Ministry said on Jun 9. The number of cases of Crimean-Congo hemorrhagic fever (CCHF) from January to May 2007 was 13 percent higher than for the same period in 2006, the ministry said. "Definitely, there's an outbreak," said Dr Onder Ergonul, an associate professor at Marmara University and a CCHF expert. A warmer climate, which Turkey has experienced in recent years, could mean a larger tick population that could in turn infect more people with the disease, Ergonul said. Authorities at the World Health Organization said they did not believe there was anything unusual about the outbreak at the moment, since CCHF occurs regularly in Turkey. Turkey's 1st known outbreak of the disease was in 2002, and the country has since adopted stronger surveillance systems, which may account for the increased number of reported cases. The Health Ministry has used acaricide, a chemical used against parasites, to reduce the tick population in the Black Sea and Central Anatolia regions, where more than 90 percent of the cases have been reported. The ministry has also worked to minimize agricultural workers' direct contact with livestock, thus decreasing their chances of exposure to the disease. (Viral hemorrhagic fevers are listed in Category A on the CDC list of Critical Biological Agents)* Non-suspect case

BRUCELLOSIS, OVINE (Russia): 11 June 2007, The Ministry of emergency situations in the Dzhidinskiy district of the republic of Buryatia is applying control measures following the identification of ovine brucellosis. According to the directorate of Rosselkhoznadzor (Federal Agency for Veterinary and Phytosanitary Surveillance), the first case of infection in animals was registered in April 2007. Victor Smolin, deputy head of the directorate of Rosselkhoznadzor, reported that 132 brucellosis seropositive sheep have been detected. No human cases have been reported. The infection affected 4 collective farms in the villages Gegetuj and Maliy Naryn. Over 1900 animals have been transported to a sanitary slaughterhouse at a meat packing plant. Repopulation of the affected farms will be possible after completion of disinfection. Surveillance activities are to be continued. (Brucellosis is listed in Category B on the CDC list of Critical Biological Agents)* Non-suspect case

CHOLERA, DIARRHEA (India): 12 Jun 2007, With the monsoon playing truant and Bangalore's weather at its unpredictable best, there has been a rise in cases of water-borne diseases. Hospitals in the city are reporting an increased incidence of gastroenteritis (GE) and the appearance of cholera. According to Bruhat Bangalore Mahanagara Palike (BBMP) health officials, 210 cases of GE were reported from the city limits until the end of May. "We have not seen any cholera cases in 2007. Even if hospitals have reported stray cases, they may not have been confirmed through bacteriology tests," said L.T. Gayathri, BBMP chief health officer. However, Victoria Hospital authorities have a different story to tell. They have confirmed 5 cases of cholera that have been referred to the Epidemic Diseases Isolation Hospital. There have, however, been no cholera fatalities. In M.S. Ramaiah Hospital, 10 cases of cholera were reported while in the Indira Gandhi Institute of Child Health, 1 or 2 children with GE are being treated every day. These cases were of a mild nature and most often were treated as out-patients, M.L. Siddaraju, director of the institute, said. (Water Safety Threats are listed in Category B on the CDC list of Critical Biological Agents)* Non-suspect case

CHIKUNGUNYA (India): 13 Jun 2007, The dreaded chikungunya has arrived in the capital of India, with one case of the mosquito-borne disease afflicting a woman. It was detected in a patient aged 36, who had come to RML hospital last week, Delhi Health Secretary D S Negi said. He said the blood sample of the woman from Paharganj was sent to the National Institute of Communicable Disease and tested positive for chikungunya. This is the first reported case of chikungunya in the capital this year. Last year, around 40 people in the capital had contracted the virus, while a total of 1695 people from across the country tested positive for the disease. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents)* Non-suspect case

CHOLERA (Iraq): 13 Jun 2007, Iraq has reported 5 cases of cholera among children in the last 3 weeks, a worrying sign as summer sets in and the war leaves sewage and sanitation systems a shambles. All of the cases were among children younger than 12 in the southern city of Najaf and were reported by medical officials on alert for signs of the potentially lethal ailment, Claire Hajaj of the United Nations Children's Fund (UNICEF) said Jun 12. Although the number of cases so far is low, and none has been fatal, the emergence of cholera this early in the year is ominous, Hajaj said. Cholera outbreaks usually don't arise until July, when temperatures can soar above 120 deg F. As the temperature rises, Iraq's

chronic electricity shortages make it difficult to operate pumps at sewage and drinking-water treatment plants, creating a dangerous mix of desperate people and dirty water. Already, the number of diarrhea cases, which can be a sign of cholera, is twice the seasonal average, Hajaj said. In the capital, Baghdad, alone, at least 135 000 residents depend on water from tanker trucks. Tens of thousands of Iraqis bore holes into the ground outside their houses and businesses and pump their own ground water. The UN estimates that only 17 percent of Iraqi sewage is being treated because of nonworking sewage treatment plants. (Water Safety Threats are listed in Category B on the CDC list of Critical Biological Agents)* Non-suspect case

SAPOVIRUS, GASTROENTERITIS (Taiwan): 13 Jun 2007, The Centers for Disease Control (Taiwan CDC) reported on Jun 12 that 55 faculty members of a college in Taipei County had been diagnosed with Sapovirus infections, the first known cases of such infections in Taiwan. Sapoviruses are caliciviruses which, together with the noroviruses, are the leading causes of acute viral gastroenteritis in humans. The virus is named after Sapporo, Japan, where the virus was first recognized during an outbreak at an orphanage. It generally causes only mild gastroenteritis in young children. CDC officials said that the virus is hard to diagnose and that the center only became capable of testing for the virus after cooperating last year with Japan's National Epidemiological Surveillance of Infectious Diseases. The officials said they were not ruling out the possibility that others might have been infected with the virus at an earlier date, but that such an outbreak had gone unrecognized. Officials said they were notified by the Taipei County Government Department of Health last month that a cluster of 55 people had exhibited symptoms of nausea, vomiting and diarrhea, and that the possibility of food poisoning had initially been ruled out. Fecal specimens from 8 infected people were sent to a laboratory for a series of tests that presented negative results to the initial battery of tests. The samples were then retested using the recently developed test for Sapovirus and 7 of the 8 showed a positive result. Officials said the virus is often transmitted through feces and oral contact, and that cases often arise in nurseries and kindergartens, but only rarely in colleges and universities. Little research has been done on Sapovirus, and the prevalence rate is unclear, officials said. They urged the public to wash their hands and maintain a healthy diet and good personal hygiene to avoid contracting the virus. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents)* Non-suspect case

SALMONELLOSIS, SEROTYPE SENFTENBERG, BASIL (Europe, USA, Morocco): 15 Jun 2007, Since the beginning of 2007, the Health Protection Agency (HPA) Laboratory of Enteric Pathogens (LEP) has reported on 51 human isolates of *Salmonella enterica* serotype Senftenberg in England and Wales. This represents a significant rise compared to fewer than 10 in the same time period in 2006 and 2005. The HPA launched microbiological and epidemiological investigations to elucidate the causes of this outbreak. To date, 7 samples of pre-packed fresh basil, grown in Israel, have tested positive for *S. Senftenberg* by HPA Regional Microbiology Network Food, Water and Environmental Laboratories in Newcastle, London, Bristol, and a NPHS-Wales Microbiology laboratory in Carmarthen. The strains of *S. Senftenberg* found on the basil samples and predominating human infections in England and Wales had a common PFGE profile. Of the 30 patients reported from England and Wales, PFGE results from the 29 tested indicate that with the exception of a single isolate, all are the outbreak strain. On 25 May 2007, an enquiry was sent to Enter-net (the international surveillance network for the enteric infections *Salmonella*, *VTEC O157* and *Campylobacter*) asking whether other countries had observed cases or products with the same characteristics. The investigations have confirmed that *S. Senftenberg* of an indistinguishable plasmid and PFGE profile has been identified from fresh basil grown in Israel and from human infections in the UK and Scotland as well as in individuals who report travel to Tenerife and Morocco. *S. Senftenberg* with an indistinguishable PFGE pattern has been reported by Denmark, the Netherlands and the USA. A combination of food surveillance, molecular microbiology and epidemiology communicated through established national and international networks means that information has been gathered quickly and communicated effectively. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents)* Non-suspect case

AVIAN INFLUENZA-RELATED REPORTS

WHO update: The WHO-confirmed global total of human cases of H5N1 avian influenza virus infection as of 15 June 2007 stands at 313, of which 191 have been fatal.

AVIAN INFLUENZA, HUMAN (Viet Nam): 13 Jun 2007, Vietnam's Health Ministry has reported 2 additional human cases of bird flu infections. The 2 latest cases include a 29-year-old man from northern Thanh Hoa province, and a 20-year-old woman from northern Ha Nam province, according to the country's Preventive Medicine Department on Jun 12. Specimens from the man, who was discharged from hospital on Jun 3 after showing such bird flu symptoms as fever, coughing and pneumonia, have recently been tested positive to bird flu virus strain H5N1. He ate a sick white-winged duck before falling ill, the department said. The woman, suffering from severe pneumonia, is under treatment at the Tropical Disease Hospital in Hanoi capital. Local doctors are probing into why she has contracted H5N1. Vietnam's Health Ministry has asked preventive medicine centers, Pasteur institutes and hygiene and epidemiology institutes nationwide to establish hotlines to receive bird flu information from the community. The ministry is also coordinating with the World Health Organization to probe into the possibility of H5N1 mutation. Since early May 2007, bird flu has hit poultry in 16 Vietnamese cities and provinces nationwide, according to the country's Department of Animal Health.

AVIAN INFLUENZA, HUMAN (Egypt): 13 Jun 2007, Egypt has reported another human case of avian flu on Jun 12. A girl from Qena, south of Cairo, has been reported transferred to a hospital after she was diagnosed with the deadly bird flu, Abdel Rahman Shahin, spokesman for the Egyptian Ministry of Health, said in a press release. The girl, 4, is the 36th person infected with the H5N1 virus in Egypt. 16 of those infected have died from the disease. At the same hospital,

another man is being treated for symptoms that may be due to the virus. The hospital in Qena is currently running tests to determine whether another infection has been discovered. Egypt is the worst hit nation outside East Asia, where the deadly disease was first discovered in humans. That the country is on a major migratory route for birds is the main reason that Egypt has been hit with the disease. Many of the victims have come into contact with infected dead birds, which occur mostly in the near vicinity of their homes.

AVIAN INFLUENZA, HUMAN (Indonesia): 15 June 2007, The Ministry of Health of Indonesia has announced a new case of human infection of H5N1 avian influenza. A 26-year-old male from Riau Province developed symptoms on Jun 3, was hospitalized on Jun 6, and died in hospital on Jun 12. Investigations into the source of his infection indicate exposure to sick and dead poultry. Of the 100 cases confirmed to date in Indonesia, 80 have been fatal.

AVIAN INFLUENZA, HUMAN (Viet Nam): 16 Jun 2007, Bird flu has killed a 20-year-old Vietnamese man, the first death in the country from the virus since late 2005, state-run television reported on Jun 16. The man died last week in the northern province of Ha Tay neighboring Hanoi, Deputy Health Minister Trinh Quan Huan was quoted as saying. The television report did not say how the victim became infected with the H5N1 virus. Vietnam's program of poultry vaccination and other measures has been described by international health experts as a model for keeping the H5N1 virus at bay, but this year the virus has spread nationwide in ducks and chickens. Vietnamese officials warned early this week that more people could be infected as bird flu in ducks and chickens has spread to nearly 1/3 of 64 provinces and cities since early May 2007. Ha Tay is not on the watch list of infected areas but the province is the biggest poultry supplier to nearly 3 million people in the capital.

*Cases and outbreaks will be cited for suspect level with regards to suspicion of BT threat. Therefore, cases and outbreaks will be categorized as "Determined BT", "Suspect" or "Non-suspect".

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

Questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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